GOVERNMENT OF ALBERTA

PEACETIME EMERGENCY OPERATIONS PLAN

FOR A SOUR GAS RELEASE

April 13 1984

(Date)

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FOR A SOUR GAS RELEASE

PURPOSE

1. This plan sets forth the manner in which the Alberta Government departments and agencies will respond to a sour gas release which may affect people and property in Alberta.

AUTHORITY

2. This plan is issued by the Minister responsible for Alberta Disaster Services under the authority of the Disaster Services Act and authorizes the government to respond in a prompt and co-ordinated manner to any release of sour gas.

DEFINITIONS

3. In this plan:

a. a **sour gas release** is an uncontrolled release of natural gas containing hydrogen sulphide which is so declared to be a Sour Gas Release by the Energy Resources Conservation Board (ERCB).

b. the **FH Order area** is that area within the boundaries delineated in an FH Order issued by ERCB under Section 89 of the Oil and Gas Conservation Act.

c. **Minister** means the Minister charged with the administration of The Disaster Services Act.

d. an **On-site Command Post** is an operations centre set up in the vicinity of the gas release to manage the emergency within the FH Order Area.

e. a **Main Control Headquarters** is an operations centre set up at a suitable location in support of the On-Site Command Post to manage the larger aspects of the emergency including public relations and the provision of information and advice to affected municipalities.

f. **Police** is a peace officer as defined in Section 25(1) (0.1) of the Interpretation Act, Chapter I-7 R.S.A. 1980, as being a member of the Royal Canadian Mounted Police or a member of a municipal police force having jurisdiction in Alberta by virtue of Section 18 (1) and Section 19 of the Police Act, Chapter P-12 R.S.A. 1980.

g. **Local Authority** means:

(1) the council of a city, town, village, county or municipal district

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(2) the board of administrators of a new town; and

(3) in the case of an improvement district or special area, the Minister of Municipal Affairs.

h. **Municipal Emergency Plans** means those emergency plans prepared by a Local Authority pursuant to Section 8(e) of the Disaster Services Act or by or in respect of a Metis Settlement.

i. **Company Emergency Plans** means emergency procedures plans prepared by an industrial operator pursuant to regulation 7.060 (9) (gas wells) or 9.060 (gas plants) made under the Oil and Gas Conservation Act, Regulation 65 made under the Pipeline Act (pipelines) or any other regulation, statute or condition.

GENERAL

4. Sour gas may contain contaminents in concentrations that could be potentially dangerous to the health and safety of people should they become exposed during a release. This plan outlines a method of responding to such an emergency when a sour gas release is declared by ERCB and should be viewed as a plan of general application. This plan describes the concept of operations, responsibilities of Alberta government departments and agencies, and some detailed aspects of the management of the emergency. In the event of any conflict between this plan and existing Acts or Regulations, those Acts or Regulations will take precedence.

IMPLEMENTATION

5. This plan will be implemented in part or in whole on the direction of ERCB.

6. Concept. The response should proceed as follows:

a. ERCB will be made aware of the threat of or the occurrance of an actual sour gas release, by the industrial operator (the licencee) or by other means;

b. ERCB will direct that this plan be activated, in part or in whole, will commence the alerting procedures and will prepare and issue, if appropriate, an FH Order;

c. in accordance with Company Emergency Plans or on the direction of ERCB, the well may be fired;

d. ERCB will establish two headquarters (see Annex A) to manage the response if required:

(1) an On-Site Command Post to deal with matters within the immediate area of the gas release. When a FH Order is made, the immediate area of the release will be the FH Order area; and

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(2) a Main Control Headquarters to deal with matters outside the immediate area of the release to provide support to the On-Site Command Post and to provide an interface with the public, the local authorities and the Government of Alberta.

e. ERCB will direct the activities at the On-Site Command Post and the industrial operator's activities related to the sour gas release. Workers' Health, Safety and Compensation has the responsibility for ensuring that all safety measures are observed at the work site;

f. ERCB will direct the activities at the Main Control Headquarters and will co-ordinate the activities of the departments and other government agencies represented there;

g. the Main Control Headquarters' channels for communication (see chart at Annex B) will be:

(1) to the On-Site Command Post;

(2) to those Local Authorities represented at the Main Control Headquarters;

(3) through Alberta Disaster Services to other Local Authorities;

(4) to those government departments represented at the Main Control Headquarters;

(5) through Alberta Disaster Services to government departments not represented at the Main Control Headquarters; and

(6) through Alberta Disaster Services to the Government of Canada except where direct communications are authorized.

h. the Main Control Headquarters is the main source of official information to the public, including health risk and other warnings; and

i. if the situation escalates requiring such additional government support that, in the opinion of the ERCB, it would be difficult to continue to manage all matters at the Main Control Headquarters, Alberta Disaster Services would be tasked to activate the Government of Alberta Emergency Response Centre, to co-ordinate those activities which are impractical to manage at the Main Control Headquarters. The Emergency Response Centre would then be activated in accordance with the Government of Alberta Peacetime Emergency Operations Plan and Procedures.

7. Alerting. ERCB may learn of a sour gas release from many sources. Any government department or agency receiving information regarding a sour gas release will notify ERCB immediately.

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ERCB will immediately alert:

a. Alberta Disaster Services who will in turn alert:

(1) all other departments, boards, agencies and crown corporations who will be involved in the Main Control Headquarters;

(2) all municipalities which are or which may be affected;

(3) any other orders of government which might be involved; and

(4) any other organizations which might have a role to play or which could otherwise be affected.

b. the RCM Police and/or such other police forces have jurisdiction in the areas involved;

c. the public threatened or potentially threatened;

d. all local authorities whose geographic area is or might be affected by the release;

e. Alberta Environment;

f. Workers' Health, Safety and Compensation;

g. Energy and Natural Resources.

8. Responsibilities

a. The Government of Alberta, its departments and agencies including the ERCB is responsible for:

(1) developing and maintaining a plan and procedures for a co-ordinated response to a sour gas release;

(2) establishing an On-Site Command Post and a Main Control Headquarters to co-ordinate the Government's response;

(3) directing and controlling operations at the location of the sour gas release including, where an FH Order has been made, control of access and egress within the FH Order area;

(4) providing prompt, co-ordinated assistance and advice to municipalities and the industrial operator engaged in a response to the sour gas release;

(5) providing information and advice to the public concerning the sour gas release and advice to the people who are or could be affected;

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(6) co-ordinating dealings with and co-operating with the Government of Canada as required;

(7) in the case of an escalation of the emergency, providing additional co-ordinated assistance to the On-Site Command Post and Main Control Headquarters by activating the Government of Alberta Emergency Response Centre.

Detailed On-Site Command Post and Main Control Headquarters functions are at Annex C and departmental and ERCB responsibilities are at Annex D to this plan.

b. Incorporated Municipalities are responsible for implementing their Municipal Emergency Plans to protect the health, safety and welfare of residents, using any or all of the resources available to the municipality;

c. Improvement Districts, Special Areas and Metis Settlements- the Minister of Municipal Affairs is responsible for implementing Municipal Emergency Plans to protect the health, safety and welfare of Improvement District, Special Area and Metis Settlement residents; and

d. Industrial operators will be responsible for implementing their Company Emergency Plans until otherwise directed by ERCB.

NOTE: To avoid jurisdictional confusion, note that the Local Authorities would continue to exercise their normal responsibilities outside of the FH Order area.

9. Monitoring. ERCB will ensure that sufficient monitoring information is gathered so that the ERCB is able to meet their responsibilities under this plan. Obtaining information on contamination levels of hydrogen sulphide and other contaminants is the responsibility of:

a. Workers' Health, Safety and Compensation wherever there are workers that may be affected; and

b. Alberta Environment for all other areas.

10. Public Advisory. Whenever monitoring information indicates that a threat or potential threat exists to members of the public the ERCB or the Main Control Headquarters once it is established, will notify:

a. the public threatened or potentially threatened; and

b. all Local Authorities whose geographical area is or might be affected by the release.

Notwithstanding the aforesaid, if the industrial operator or Alberta Environment, through their monitoring or otherwise, become aware of concentrations of contaminants that present an immediate threat to persons in the area, the industrial operator or Alberta Environment as the case may be, will immediately notify those persons and the On-Site Command Post or the Main Control Headquarters of such a threat.

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11. Evacuation. Evacuation may take many forms and could range from a few individuals to entire small communities exposed to sudden or accumulated concentrations of sour gas. Such action will be recommended to the municipality by the Main Control Headquarters. Evacuation advice will be in one of four general categories. These are:

a. Voluntary. Where the authorities do not consider the hazard sufficient to warrant advising evacuation, some individuals may choose to leave of their own accord.

b. Advisory. Where there may be a hazard to people with respiratory or other health problems, they would be advised to leave;

c. Urgent. Where there is a serious hazard and people's health and welfare could be adversely affected if they didn't leave immediately, this information would be passed by the most expeditious means available which could be by telephone, by loud hailer or by going door-to door; and

d. Enforced. ERCB has the authority to order evacuation out of an FH Order area. A municipality may acquire authority to order evacuation of any part or all of its area of jurisdiction by declaring a State of Local Emergency under The Disaster Services Act.

12. Reception. Alberta Disaster Services will alert those municipalities designated for reception of evacuees and will co-ordinate reception arrangements, where necessary.

13. Security.

a. The RCM Police will be responsible for the control and the security of any evacuated areas in the absence of a recognized municipal police force; and

b. the ERCB will arrange for control of air traffic through the area through the Federal Ministry of Transport who will in turn issue a NOTAM (Notice to Airmen) or a special Federal Ministerial Order.

14. Situation Reports. All Government of Alberta departments, boards and agencies involved in the emergency response will provide the Main Control Headquarters and On-Site Command Post with a situation summary daily, or as otherwise required, which will be amalgamated into a Government situation report.

15. Public Information. The Public Affairs representative at the Main Control Headquarters will manage and release information to the media on behalf of the Main Control Headquarters. The Public Affairs Bureau will establish and staff a public inquiry centre for the Main Control Headquarters for briefing media and responding to inquiries from the general public.

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16. Communications. The telephone will be the primary means of communications. Where practical the telephone will be supported by a "hard copy" capability either as an attachment to the telephone, telex or other means. Should additional communications arrangements be required, Alberta Government Telephones will be tasked to provide them. Alberta Government emergency communications requirements will be co-ordinated through Alberta Disaster Services.

17. Government of Canada Assistance. Requests for federal government assistance from any government department or agency, except where direct communications are authorized, shall be directed to Headquarters, Alberta Disaster Services, for transmission to the Regional Director, Emergency Planning Canada or to the Department of National Defence as necessary.

ANNEXES

Annex A - Sour Gas Release Emergency Response Organization

Annex B - Sour Gas Release Emergency Response Information Flow

Annex C - Sour Gas Release Functions

Annex D - Government of Alberta Responsibilities For Special Services Related To A Sour Gas Release

Annex E - Levels of Hydrogen Sulphide, Their Effects and Counteracting Measures

Annex F - Industrial Operator Responsibilities

Annex G - Glossary of Terms

DISTRIBUTION

ACTION

Minister-in-charge, Alberta Disaster Services

- Executive Assistant

Alberta Disaster Services

- Managing Director
- Assistant Executive Director (DP)
- Assistant Executive Director (DG)
- Division Directors
- District Officers
- Staff Officers
- Emergency Response Centre
- Spares

Government Departments

- Emergency Planning Officers and Alternate Emergency Planning Officers

INFORMATION

Alberta Municipalities

- Directors of Disaster Services, Incorporated Muncipalities

Alberta Legislative Library

- Provincial Archives of Alberta

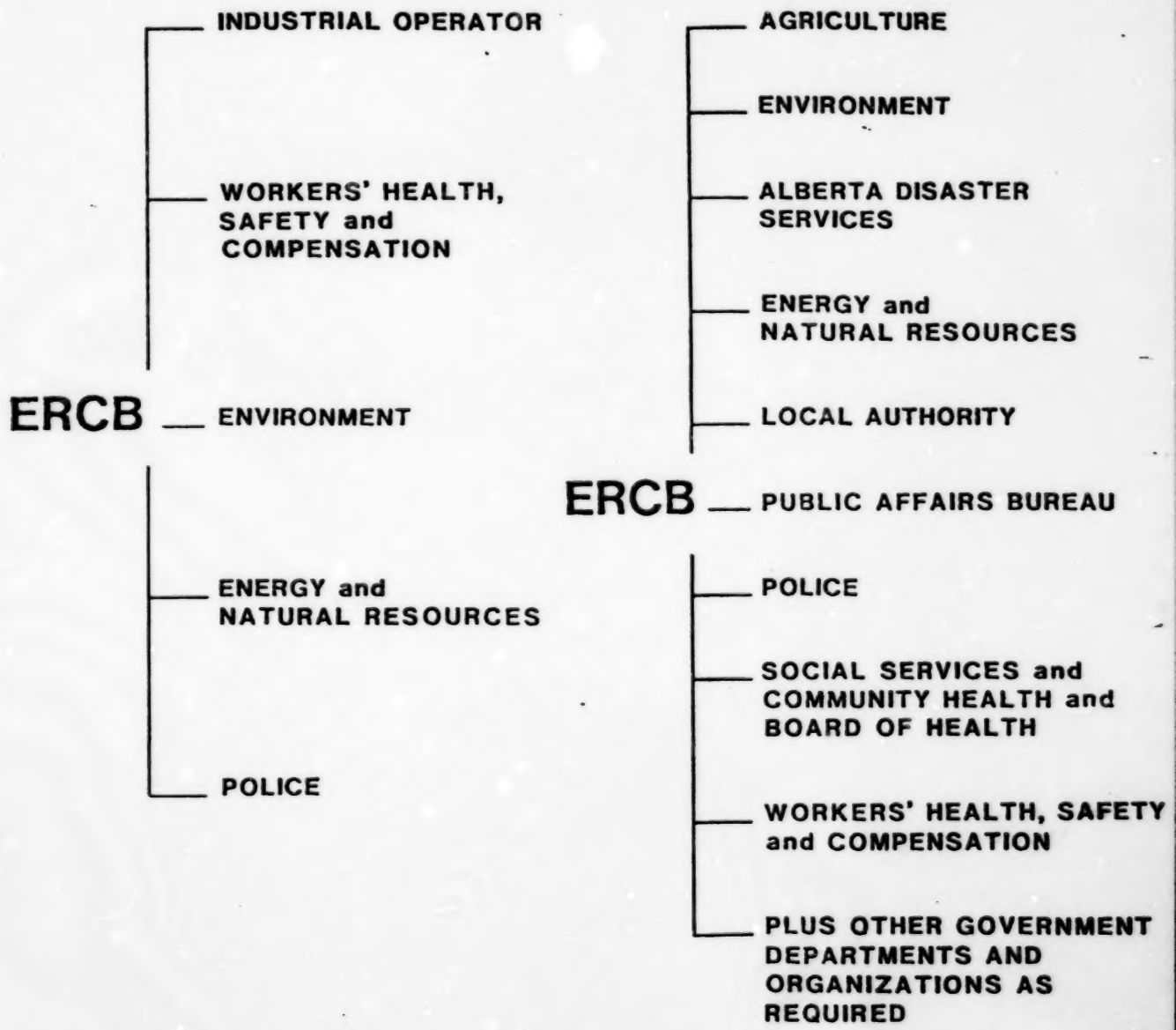
Government of Canada

- Regional Director, Alberta, Yukon and Northwest Territories, Emergency Planning Canada
- Federal Study Centre, Arnprior, Ontario
- Regional Director, Indian and Northern Affairs
- Director, Western Region, Parks Canada
- Superintendents, National Parks in Alberta
- K Division RCMP
- Commander, Air Command Detachment Edmonton

Provincial/Territorial Emergency Preparedness Organizations

- Canadian Petroleum Association
- Independent Petroleum Association
- Edmonton Pipeline and Utility Operators
- Alberta One - Call

SOUR GAS RELEASE
EMERGENCY RESPONSE ORGANIZATION



SOUR GAS RELEASE

FUNCTIONS

ON SITE COMMAND POST

1. Control and supervise activity at the site to normalize the situation.
2. Warning to and evacuation of residents within the FH Order area.
3. Protection of life and property within the FH Order area.
4. Safety at the gas release site.
5. Monitoring gas concentrations within the FH Order area.
6. Security within the FH Order area.
7. Local weather information.
8. Technical gas release - related information.
9. Situation reports to Main Control Headquarters.

MAIN CONTROL HEADQUARTERS

1. Provide support to the On-Site Command Post. Compile monitoring information and evaluate.
2. Monitor gas concentrations outside the FH Order area.
3. Determination of the threatened area.
4. Safety of all workers in the threatened area.
5. Security and movement control within the threatened area except within the FH Order area.
6. Liaison, co-ordination and support to affected Local Authorities.
7. Warning and assistance to Local Authorities for evacuation and reception.
8. Situation reports to the Government of Alberta.
9. Situation reports to the On-Site Command Post.

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10. Information to the media.

11. Information to the public.

12. Health effects information.

13. Agricultural effects information.

14. Other environmental effects information.

15. Answer inquiries from the public.

16. Technical advisory services.

17. Obtain weather information.

EMERGENCY RESPONSE CENTRE (IF ACTIVATED)

1. Provide the co-ordinated Government of Alberta support to the Main Control Headquarters.

2. Arrange for any outside resources required by the Main Control Headquarters.

3. Arrange for resources of the Government of Canada or other outside governments, if required, to support the Main Control Headquarters.

4. Situation reports to the Main Control Headquarters.

5. Assume and exercise control of the total response (government, municipal, industrial) upon the declaration of a State of Emergency by the Lieutenant Governor in Council.

GOVERNMENT OF ALBERTA

RESPONSIBILITIES FOR SPECIAL SERVICES

RELATED TO A SOUR GAS RELEASE

1. The following sets forth the responsibilities of Government of Alberta departments, boards, Bureaux and Crown agencies for providing special services related to peacetime emergency operations due to a sour gas release.

2. AGRICULTURE

   a. Provide advice to the Main Control Headquarters regarding the effects of contaminents on agriculture and livestock and plants and soil.

   b. Provide advice to the Main Control Headquarters on any mitigation procedures or arrangements to be effected.

   c. Provide a representative to the Main Control Headquarters on a 24 hour basis, if requested by ERCB.

3. DISASTER SERVICES

   a. Effect the Government of Alberta fan-out to alert all affected departments.

   b. Alert all affected municipalities.

   c. Confirm that "K" Division, RCM Police has been informed.

   d. Provide a staff officer to the Main Control Headquarters on a 24 hour basis, if required.

   e. Provide a Disaster Services Liaison Officer to the Main Control Headquarters.

   f. Activate the Government of Alberta Emergency Response Centre if required.

   g. Collect, collate and analyse the Government of Alberta peacetime emergency operations costs.

   h. Co-ordinate reception plans for evacuation and reception municipalities.

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i. Inform Alberta Government Telephones of priority of emergency communications.

j. Make recommendations to Government regarding assistance to disaster victims and the sharing of costs of emergency or disaster operations.

k. Co-ordinate the preparation and regular review of the Sour Gas Release contingency plan.

4. ENERGY AND NATURAL RESOURCES

a. Provide emergency temporary accommodation and emergency feeding equipment, if requested by ERCB.

b. Provide assessment relating to all aspects of the renewable resources sector.

c. Provide advice to ERCB with regard to the firing of a sour gas release in the public lands.

d. Provide a representative to the Main Control Headquarters on a 24 hour basis, if required by ERCB.

5. ENERGY RESOURCES CONSERVATION BOARD

a. Alert the Government of Alberta to a sour gas release through Alberta Disaster Services.

b. Declare a sour gas release and inform Alberta Disaster Services, the RCM Police nearest the scene, the public threatened or potentially threatened, all Local Authorities whose geographic area is or might be affected by the release, Alberta Environment, Energy and Natural Resources, Workers' Health, Safety and Compensation and Alberta Disaster Services.

c. Determine the extent of the immediate hazard and issue an FH Order if considered necessary.

d. Direct the firing of a sour gas release if required.

e. Ensure the industrial operator is advising persons in immediate danger of high contaminent concentrations to evacuate by house-to-house contact (assisted by RCM Police and the Local Authority).

f. Supervise and control operations and mitigation activities within the FH Order area including the ordering of enforced evacuation and the control of access.

g. Arrange for the security of the FH Order Area.

h. Establish an On-Site Command Post and a Main Control Headquarters and direct the activities thereof.

j. Arrange for closure of airspace as required.

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6. ENVIRONMENT

a. Manage all sour gas monitoring activities except those activities for which Workers' Health, Safety and Compensation are responsible under the Occupational Health and Safety Act.

b. Determine areas at risk from the sour gas release.

c. Recommend evacuation to Main Control Headquarters of any areas where excessive levels of sour gas, as determined in consultation with Social Services and Community Health, are detected. (In emergency situations nearby residents will also be warned.)

d. When required, establish an appropriate weather facility in the vicinity of the sour gas release.

e. Provide representatives to the On-Site Command Post and the Main Control Headquarters on a 24 hour basis.

7. MUNICIPAL AFFAIRS

a. Provide damage and loss appraisals of property to affected citizens within the expertise of the department.

b. Manage the emergency response, including the declaration of a State of Local Emergency for those municipalities over which the department has direct control.

c. Provide a representative to the Main Control Headquarters on a 24 hour basis, if requested by ERCB.

8. PUBLIC AFFAIRS BUREAU

a. Keep the public informed by:

(1) Making public information releases based on the situation report developed at the Main Control Headquarters;

(2) making information releases regarding the general effects to health, safety and welfare; and

(3) other information activities as considered desirable.

b. Assign a Public Affairs Officer to the Main Control Headquarters on a 24 hour basis and to the Emergency Response Centre, if activated.

c. Establish and staff a public inquiry centre with a publicized centre telephone number to support the Main Control Headquarters.

d. Establish a Public Affairs Management Control Centre at the Public Affairs Bureau responsible for all Public Affairs information coordination.

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9. SOCIAL SERVICES AND COMMUNITY HEALTH/PROVINCIAL BOARD OF HEALTH/LOCAL BOARD OF HEALTH

a. Establish health safety levels for the escaping contaminants. (see Annex E)

b. Monitor the health effects of the incident, to ensure appropriate data is collected and investigate such health effects. Advise on the appropriate remedial measures to be undertaken. May recommend further investigations after the event.

c. Provide health advice to those response organization personnel developing action guidelines for the levels of sour gas which could be involved in the release.

d. Provide health advice and safety levels for any health care or special care facilities and for the more vulnerable residents.

e. Provide advice to the government, particularly the Public Affairs Bureau representative at the Main Control Headquarters, on the existing or potential health effects of the incident.

f. Provide information to the public inquiry centre.

g. Provide a representative to the Main Control Headquarters on a 24 hour basis, if requested by ERCB.

h. Ensure that the necessary expertise, resources and information are available to local health authorities for them to carry out their role.

i. The local health authority ensures that individual members of the public are informed of specific risks and that appropriate health information is provided to Local Authorities and health care facilities.

10. SOLICITOR GENERAL

Through the RCM Police or a recognized police force:

a. Maintain law and order.

b. Warn and reinforce local police services, if required.

c. Notify the Alberta Disaster Services Duty Officer of a sour gas release.

d. Security control as required.

e. Act on behalf of the medical examiner in accordance with the Fatalities Inquiries Act.

f. Traffic and crowd control.

g. Provide a representative to the On-Site Command Post and Main Control Headquarters on a 24 hour basis.

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11. WORKERS' HEALTH, SAFETY AND COMPENSATION

a. Monitor the health and safety of all occupations at a work site, except agriculture, and ensure that necessary precautions are taken to protect the workers' health and safety during the emergency;

b. Ensure that equipment and personnel required for on-site evaluation of chemical levels are provided by the appropriate employers;

c. Provide information on toxic chemicals to the Main Control Headquarters; and

d. Provide a representative to the On-Site Command Post and the Main Control Headquarters on a 24 hour basis.

12. ALBERTA GOVERNMENT TELEPHONES

a. Provide emergency communications services to government departments as co-ordinated by Alberta Disaster Services.

b. Provide operating and maintenance personnel to ensure the continuity of emergency communications services.

LEVELS OF HYDROGEN SULPHIDE

THEIR EFFECTS AND COUNTERACTING MEASURES

1. At levels below 5 parts per million, people may experience effects such as headache, nausea, eye irritation and wakefulness. These are not serious and are reversible. Above 5 parts per million a health hazard may exist. The following action levels have therefore been established as a guide:

   a. When average levels exceed 5 parts per million for 6 hours or 10 parts per million for 1 hour or more and symptoms persist or become more severe, individuals should consider moving from the area.

   b. When average levels exceed 10 parts per million for 8 hours or more, local conditions in the area will be assessed and individuals may be advised to leave the area.

   c. When environmental monitoring indicates that a level of 20 parts per million or more will be reached and conditions indicate that a health hazard exists, urgent evacuation will be advised.

2. Similar information regarding other contaminants will be added. These stated levels are to be used as a guide only. Government health authorities will either confirm or amend these levels at the time of the sour gas release and in the light of information available at the time.

3. These levels of contaminents will be reviewed and may be adjusted after the publication of the Lodgepole Report.

Annex F to
Government of Alberta
Peacetime Emergency
Operations Plan for a
Sour Gas Escape

N.B. Although not a part of the plan, this Annex is included as information.

INDUSTRIAL OPERATOR RESPONSIBILITIES

1. Tell ERCB of the sour gas escape.

2. Fire sour gas if industrial operator procedures so state or if directed by ERCB.

3. Monitor contaminant levels downwind as directed by industrial operator procedures or ERCB.

4. Ensure residents near release site are notified of the hazard and evacuation guidelines.

5. Ensure that arrangements are made for transportation for the prompt evacuation of residents immediately at risk.

6. Notify residents of evacuation advice or order as directed.

7. Provide input to strategy for control of well.

8. Provide monitoring personnel and equipment.

9. Provide support and take such further action as directed by ERCB.

GLOSSARY OF TERMS

ERCB	Energy Resources Conservation Board
FH Order	Fire Hazard Order. Issued by ERCB to close off a specific area to unauthorized personnel.
Order of government	Municipal, provincial, federal
State of Emergency	Declaration by the Lieutenant Governor in Council to acquire additional powers under The Disaster Services Act to deal with an emergency or disaster
State of Local Emergency	A declaration by a Local Authority to acquire similar emergency powers to deal with an emergency or disaster